





**D.** *Compare the data table for a range of stars.*

1. Are more massive stars the brightest and hottest types of star for their whole lives?
2. Which mass star gets the hottest?
3. Which mass star gets the coolest?
4. Which mass star becomes the most luminous?

**E.** *Deneb and Betelgeuse are both 20x the mass of the Sun, but look very different. Deneb has 100 times the radius of the Sun and its temperature is about 8000 K. Betelgeuse has 1000 times the radius of the Sun and its temperature is about 3500 K.*

*Select a star with 20x the mass of the Sun and run the animation, use this to find:*

1. What stages of their lives the two stars are in.
2. How long each star has to live.